

A B S T R A C T

The present invention discloses a system and method for back-up and usage of secure copies of smart card data objects, providing a virtual smart card (VSC) having the same defined logical file structure and the same content of data objects as its assigned real smart card, a virtual smart control program handling the creation as well the read/write process of the VSC, a communication component allowing communication between the virtual smart card and its assigned real smart card, and preferably a smart card manager graphical user interface component allowing different actions with respect to data objects to be securely backed-up on the virtual or the real smart card via the communication component. The VSC is a software implemented version of a real smart card providing the equivalent functionality of a real smart card. The VSC is created and used by a VSC control program handling the creation, the security and the read/write process of the VSC. The VSC having a logical file structure comprising a public area, a private area, a secure key area, password area, and an unique identifier area. The data objects contained in the public area having no access restrictions, data objects placed into the private area are encrypted and can be accessed by using a password, and the data objects placed into secret key area are encrypted and only accessible by the VSC control program. Each VSC may be addressed by unique identifier (ID). All data objects can be stored and retrieved on/from the

virtual smart card's public and private area via the virtual smart card control program using the communication component. The smart card manager graphical user interface component allows different tasks to create and to use VSCs and handles different tasks required for real smart cards and VSCs to handle data objects, e.g. importing/exporting, copying/pasting data objects. An essential advantage of this invention is that backed-up smart card data objects in the VSC allows the user to continue working with the most of the applications if the real smart card lost or damaged. (Fig. 2)